## Message

From: Meacham, John M. [/O=NPPD/OU=CGO/CN=RECIPIENTS/CN=JMMEACH]

**Sent**: 8/27/2013 6:37:53 PM

**To**: Spencer, Michael J. [Mick] [mjspenc@nppd.com]

Subject: RE: Multi-Pollutant Control GGS

Will do,ick.

Sent with Good (www.good.com)

----Original Message----

From: Spencer, Michael J. [Mick]

Sent: Tuesday, August 27, 2013 01:34 PM Central Standard Time

To: Meacham, John M.

Subject: FW: Multi-Pollutant Control GGS

John - help me remember to discuss this with you tomorrow.

Thanks!

Mick

From: Spencer, Michael J. [Mick]

Sent: Tuesday, August 27, 2013 1:33 PM

**To:** Kent, Thomas J.

Subject: RE: Multi-Pollutant Control GGS

Tom,

I can answer a couple of the questions now. The station service for scrubbers is 36 MW; there is an additional 10 MW for SCRs. Note, however, that the impact to rated net capacity will be offset to some extent by the U2 HP turbine retrofit (2007), and the U1 LP turbine retrofit (planned implementation 2015). As far as how the impact would be factored into the VOM equation, it will just be an increase in station service (I'm not certain how that is accounted for now, but the methodology will not change). The majority of the VOM cost for MPC equipment will be chemicals/reagents associated with scrubbers. I suspect SCR catalyst cost will not be included since it should be incurred beyond the normal short run maintenance period, but it may depend upon how it is treated from an accounting standpoint. I will have to get the O&M cost for MPC equipment from John Meacham. He is out of the office today, but I am meeting with him tomorrow.

Mick

From: Kent, Thomas J.

**Sent:** Tuesday, August 27, 2013 1:07 PM

To: Spencer, Michael J. [Mick]

Subject: Multi-Pollutant Control GGS

In the analysis that we've completed to date for GGS MPC equipment have we estimated additional VOM costs resulting from the operation of the MPC equipment? If so, what is the proposed cost range? I assume the majority of the VOM cost for MPC equipment is chemicals? What is the expected output reduction of the unit due to increased house loads from MPC? Will the "costs" associated with the increased house loads be included in the numerator of the VOM equation as an energy cost or in the denominator of the VOM equation as an output reduction? I assume the denominator, but hadn't thought through it yet.

Thanks,

Town

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